

Submitted to Central Ministry of Environment and Forest (MoEF) at the beginning of the CDKN project. Based on this policy brief, MoEF has asked all SAPCCs to incorporate gender dimensions.

A Gender Policy Framework for State Action Plans on Climate Change (SAPCCs)

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This policy brief highlights the gender dimensions of climate change in the context of the State Action Plans on Climate Change (SAPCCs), some of which are available on State government websites. It provides an insight into gender differentiated impacts of climate change, why women need to be an integral part of all climate solutions and suggests specific actions that different government and non-government agencies must take to ensure that women are able to adapt to climate change and contribute to overall development of the country by helping achieve its development goals.

Introduction: Is climate change gender-neutral?

Gender and climate change are usually treated as two distinct fields of intervention though growing empirical studies and literature on gender and climate change adaptation show that gender differentials are critical to the success of adaptation interventions. This is because of the different roles that men and women play in society and because of the unequal power relations between them. While a large number of poor, rural women depend on climate-sensitive resources for survival and their livelihoods, they are also less likely to have the education, opportunities, authority, decision-making power and resources they need to adapt to climate change. Women's vulnerability to climate change differs from men and climate change interventions that are not gender-responsive often result in deepening the existing gender divide.¹

Thus, a strong gender component is necessary for successful articulation and implementation of all the State Action Plans on Climate Change (SAPCCs).

The National Action Plan on Climate Change (NAPCC) flags this gender divide and says that 'the impacts of climate change could prove particularly severe for women. With climate change, there would be increasing scarcity of water, reduction in yields of forest biomass, and increased risks to human health with children, women and the elderly in a household becoming the most vulnerable. With the possibility of decline in availability of foodgrains, the threat of malnutrition may also increase. All these would add to deprivations that women already encounter and so in each of the adaptation programmes, special attention should be paid to the aspects of gender.'² The table in **Annexure 1**, based on a recent study³, shows the gendered impact of climate change in four agro-climatic zones in India.

¹ Fourth Assessment Report (2007) of the Inter-governmental Panel on Climate Change (IPCC), Chapter 17, especially pages 729-730

² NAPCC, , pg 12

³ From an independent 2011 study on Gender and Adaptation Policies and Practices (pg 20). Full report available at:

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The Fourth Assessment Report (2007) of the Inter-governmental Panel on Climate Change (IPCC) also concludes that ‘the role of gender in influencing adaptive capacity and adaptation is thus an important consideration for the development of interventions to enhance adaptive capacity and to facilitate adaptation.’⁴

Addressing gender concerns is also vital to realize India’s national development priorities, including the Millennium Development Goals.⁵ The table in **Annexure 2** shows why women matter when addressing climate change barriers to development.

Women as Key Stakeholders

Adaptation Plans of all SAPCCs’ primarily focus on agriculture and allied services, water resources, forestry and on coping with natural disasters. Official records and statistics show that gender concerns are dominant in these areas.

Women alone handle about 60% of agricultural operations like sowing of seeds, transportation of sapling, winnowing, storage of grain etc and help men perform the other tasks.⁶ They spend up to 60% of their time in agriculture-related activities.⁷ The climate-sensitive agriculture sector employs 80% of all economically active women.⁸ In fact, ‘almost all women in rural India can be considered as ‘farmers’ in some sense, working as agricultural labourers, unpaid workers in the family farm enterprises or combination of the two.’⁹ According to the 11th Five-year Plan, there is an increasing feminization of the agriculture sector, including agriculture labour, and an increasing number of women-headed households in the agriculture sector. About a fifth of the rural households are now women-headed. The dominance of women workers is also seen in animal husbandry, collection of minor forest produce¹⁰ and about a quarter (24%) of all fishers/fish farmers are women.¹¹

Women are also typically responsible for providing their homes with water, firewood, fodder, food and herbs - all of which are also sensitive to climate changes. The 11th Plan says that ‘women and girls spend a great deal of time gathering fuel, adversely affecting their (health), productivity and education’ Officially,¹² ‘92% of rural domestic energy still comes from ‘unprocessed biofuels (firewood, crop waste, cattle dung), and 85% of rural cooking fuel is gathered from forests, village commons, and fields.’

<http://alternativefutures.org.in/userfiles/Engendering%20the%20Climate%20for%20Change.pdf>; Summary in Hindi and English available at: <http://alternativefutures.org.in/userfiles/file/publications/Policy%20Brief%20Why%20Women%20Matter,%20English%20and%20Hindi.pdf>

⁴ Chapter 17, See especially pages 729-730

⁵ Ministry of Environment and Forests, ‘A Framework for Preparation of State-level Action Plans on Climate Change.’

⁶ National Commission for Women (1995) ‘Women in Agriculture’ in Study on Impact of WTO on Women; available at:

<http://ncw.nic.in/pdfReports/Impact%20of%20WTO%20Women%20in%20Agriculture.pdf>

⁷ FAO (March 2011), The Role of Women in Agriculture, Working Paper No. 11-12, available at:

www.fao.org/docrep/013/am307e/am307e00.pdf Also see the FAO’s full report, The State of Food and Agriculture 2010-11: Women in agriculture: Closing the gender gap for development, available at: <http://www.fao.org/publications/sofa/en/>

⁸ Ministry of Rural Development, Mahila Kisan Sashaktikaran Pariyojana (MKSP) Guidelines, National Rural Livelihoods Mission (NRLM).

⁹ Ministry of Rural Development, National Rural Livelihood Mission (NRLM), Mahila Kisan Sashaktikaran Pariyojana (MKSP) Document.

¹⁰ All taken from the 11th Plan

¹¹ FAO (March 2011), The Role of Women in Agriculture, Working Paper No. 11-12, available at:

www.fao.org/docrep/013/am307e/am307e00.pdf (pg 15).

¹² All taken from the 11th Plan

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Several studies¹³ have also shown that weather-related disasters affect women more than men, both in terms of number of deaths and post-recovery well-being. Women also shoulder a greater care-taking burden during the rehabilitation phase and men return to their productive roles faster than women.

A recent study¹⁴ gives empirical evidence, from four agro-climatic zones, to show how women are impacted more than men; and, where adaptation measures are undertaken, how they play a greater role than men in helping these succeed. The study shows how climate change is making matters worse for women because women are investing more time and labour to both cope with climate change impacts and in many of the adaptive interventions.

Thus, there is a need for **double mainstreaming** wherein all adaptation interventions are gender-responsive and all development programmes and schemes integrate adaptation and gender to ensure balanced and inclusive growth.

Framework to Incorporate Gender Concerns in SAPCCs¹⁵

| Overall Approach | |
|---|---|
| Promote women as drivers of change, building on women's agency for adaptation across all relevant State Departments | |
| Area of Intervention | Gender-responsive Components |
| Presentation of the State-level Climate Change Action Plans | <ul style="list-style-type: none"> ◆ Gender-responsive language and analysis in the SAPCCs. <i>For example, sea-ingress and frequent coastal storms will lead to increased loss of livelihoods for men and women; impacts of climate change-induced land degradation due to drought/soil erosion/waterlogging/etc, will put different burden on men and women as male distress migration may increase leaving women-headed households to till the land; scarcity in water resources/fuelwood/forest resources will increase women's workloads and time spent to access these resources for the house and water/fodder for the animals.</i> ◆ Socio-economic vulnerability assessment to be part of the overall vulnerability assessment in the SAPCCs¹⁶ because adaptation interventions depend on local capacities. |
| More relevant information and actions needed for adaptation- | <ul style="list-style-type: none"> ◆ Collection of gender-disaggregated baseline data. ◆ Setting of gender-specific objectives in programmes and schemes. |

¹³ UNDP 2010, IPCC 2007, Oxfam 2005, IUCN (undated) – all quoted in 'Engendering the Climate for Change: Policies and Practices for Gender-just Adaptation' (2011)

¹⁴ 'Engendering the Climate for Change: Policies and Practices for Gender-just Adaptation' (2011) by Aditi Kapoor, Alternative Futures, New Delhi (2011). Available at www.alternativefutures.org.in

¹⁵ Adapted from Engendering the Climate for Change: Policies and Practices for Gender-just Adaptation' (2011)

¹⁶ The Madhya Pradesh SAPCC has made a beginning by factoring in socio-economic vulnerability indicators to some extent.

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| <p>related programmes/schemes of other Departments</p> | <ul style="list-style-type: none"> ◆ Setting gender-specific indicators in programmes and schemes. ◆ Carrying out gender-focused monitoring and evaluation, including gender-sensitive audits of adaptation programme and schemes. ◆ Building capacities of women and men to implement participatory schemes at the village-level; and to be active members of decision-making bodies within the 3-tier governance institutions. ◆ Building capacities on gender and adaptation within all governance institutions – the PRIs, line agencies, DRDAs and the District Commissioner/Collector offices. |
| <p>Data Collection</p> | <ul style="list-style-type: none"> ◆ Involving more women and women scientists in data collecting teams to: <ul style="list-style-type: none"> ➤ Recognise women’s climate-related observed data at the local level through documentation; ➤ Collaborate with local women to collect and analyze climate-related data; and ➤ Scientifically validate women’s traditional knowledge, build on it. |
| <p>Special working relationship with the Departments of Women and Child Development</p> | <ul style="list-style-type: none"> ◆ Partner, support and collaborate with the Departments of Women and Child Development on adaptation programmes and schemes to help build capacities within the Departments to work gender and climate change adaptation. |
| <p>Special focus on adaptation through Gram Panchayats</p> | <ul style="list-style-type: none"> ◆ Partner, support and collaborate with the Panchayati Raj Department to help Gram Panchayats develop participatory and gender-just ‘Local Action Plans on Adaptation’ or LAPAs, at the Panchayat level, in addition to their mandate of developing and implementing the Village-level Development Plans. <p><i>This would include building capacities of PRI Members on climate proofing, carrying out local measurement of climate variables, appreciating gender-disaggregated impacts of climate change and pro-actively involving women in decision-making, managing and implementing adaptation-focused programmes and schemes.</i></p> |
| <p>Encouraging ‘bottoms-up’ learnings on adaptation interventions and working with multi-stakeholder partnerships, including women-focused groups.</p> | <ul style="list-style-type: none"> ◆ Building a gender-responsive communication strategy to inform and garner input from the general public on adaptation measures. <i>This means active participation of women in the public debates and in feedback systems</i> ◆ Scaling-up/learn from on-going community initiatives on adaptation with a focus on successful roles played by women ◆ Building capacities and hand-hold vulnerable people, especially women, in an on-going and sustainable manner. ◆ Promoting women as drivers of change and build on women’s |

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| | agency |
| Gender Budgeting | <ul style="list-style-type: none">◆ Networking across stakeholders to help deliver successful adaptation models to those most vulnerable to climate vagaries.◆ Ensuring gender-budgeting based on gender-differential data. <i>Thus, for example, if more women are engaged in farming due to extensive male migration (seasonal or permanent), more adaptation funds be targeted for women and accounted for. Again, adaptive measures to augment water sources be directed towards women's involvement (as owners, workers, managers, etc) if women shoulder the responsibility of accessing water.</i>◆ Developing participatory and gender-just LAPAs including required additional resources for women. |

See Annexures 1 and 2 below:

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| Annexure 1 Gendered Impacts of Climate Change | | |
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| Climate Change | Impacts on Women | Impacts on Men |
| Lower food production | <ul style="list-style-type: none"> ◆ Least to eat; sleep on an empty stomach ◆ Need to take on additional work as wage labour – feminisation of agriculture labour (States: WB, UP, AP) | 1 st priority to available food |
| Cyclone Aila, floods, water-logging, droughts, delayed snowfall – drying waterways | <ul style="list-style-type: none"> ◆ Longer walks to get water and fuelwood ◆ Loss of fodder and livestock – primarily women’s livelihood ◆ Drought/infrequent spells of rains – harder ground to do work on | Distress migration |
| Higher summer temperatures | <ul style="list-style-type: none"> ◆ Lower milk production among animals ◆ More tiring work in fields even in April (HP) ◆ Longer hours - ◆ “I wake up 2 hours earlier to go to the field in summers now because the afternoons are too hot to work,” Lakshmi Devi (AP), Same in HP, Eastern UP | <p>Lesser tasks in the field</p> <p>Distress migration</p> |
| Effect on regeneration of species | Medicinal herbs and fodder unavailable in forests now (HP) | |
| Heavy rainfall | <ul style="list-style-type: none"> ◆ More weeding jobs ◆ Water, fodder, fuelwood difficult ◆ Excess rains/low rainfall, women’s opportunity for wage employment declines | |
| Untimely rainfall Rain in villages where it used to snow | Lower farm production & consequences of male distress migration – work overload on own farm and as wage labour + care giver | Distress migration |
| Social impact: higher indebtedness | Women go to take loans and have the responsibility to pay off loans! They take loans from parental family, pawn their jewellery to pay off agricultural loans. | Distress migration |
| Social impact: male migration | Women and child trafficking/HIV AIDS | |
| Social impact: domestic violence | Increase in domestic violence | |

Adapted from Engendering the Climate Change Report (2011)

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| Annexure 2 Gender, Climate Change and MDGs | | |
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| MDGs | Climate change barriers to development | Gender dimension |
| Goal 1: Eradicate extreme hunger and poverty | Reduction of agricultural production for survival and commercial ends | Loss of domestic species of plants and animals used by women to ensure food security of their families. |
| | Food security at risk Less access to safe water | Reduction, mobilization, or extinction of marine species used by women for household consumption or for productive activities. Increase in women's workload due to decline in availability of water and other resources. |
| Goal 2: Achieve universal primary education | Increases the workload needed for agricultural production and subsistence activities | Generally, girls and women are responsible for the collection of water and fuel wood. If the time they invest in these tasks increases, their capacity to attend school is at risk. |
| | Environmental changes are likely to drive migration | According to UNHCR, 80% of refugees in the world are women and children. Migration of populations, given extreme changes and disasters, could interrupt and limit the opportunities for education. Men are more likely to migrate, either seasonally or for a number of years. Female-headed households left behind are often the poorest. The workloads of these women, their children and the elderly increase significantly as a result of male migration. |
| Goal 3: Promote gender equality | Depletion of natural resources, reduced agricultural productivity and increased climate-related disasters could: <ul style="list-style-type: none"> ◆ Place additional burden on women's health ◆ Reduce the livelihood assets of women ◆ Increase women's time to | <i>This dimension has been mainstreamed across all the other Goals.</i> |

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access water, fuelwood, fodder and food thereby reducing time to participate in income-generating activities or in decision-making groups

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| Goal 4: Reduce child mortality | Environmental effects can aggravate the risk of contracting serious illnesses | Increase in women's workload due to their role as primary care givers in the family. |
| Goal 5: Improve maternal health | Increased prevalence of some vector-borne diseases | Loss of medicinal plants used by women. |
| Goal 6: combat HIV/AIDS, malaria and other diseases | Increase in temperatures (heat waves) | Pregnant women are particularly susceptible to water-borne diseases. Pregnant women are four times likely to contract malaria and 18 times more likely if they are carrying the HIV virus ¹⁷ . Malaria-induced maternal anaemia is responsible for a quarter of maternal mortalities. |
| | | Women and children are fourteen times more likely to die than men during a disaster. ¹⁸ |
| | | The high mortality rates of mothers / women / spouses during disasters result in an increase in: the numbers of orphans and mortality rates; early marriages for young girls (new spouses) causing them to drop out of school; trafficking and prostitution which in turn increase exposure to HIV/AIDS. ¹⁹ |
| | | Migration enhances the risk of getting HIV/AIDS, given that families are separated and they are forced to live in overpopulated spaces. |
| | | In developing countries, the poorer households affected by HIV/AIDS have less resources to adapt to the impacts of |

¹⁷ http://www.eurongos.org/Files/HTML/EuroNGOs/AGM/Malaria_Climate_Change_SRH.pdf,

¹⁸ http://cmsdata.iucn.org/downloads/disaster_and_gender_statistics.pdf

¹⁹ Oxfam International. (2005). The tsunami's impact on women. Oxfam Briefing Note, Oxford, United Kingdom. Available at http://www.preventionweb.net/files/1502_bn050326tsunamiwomen.pdf

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| | | climate change. The need to adopt new strategies for crop production (such as irrigation) or mobilization of livestock is harder for female-headed households and for houses with HIV infected people. |
| Goal 7: Ensure environmental sustainability | <p>Extinction of species, changes in species composition, disruption of symbiotic relationships, changes in tropic cascades, among others.</p> <p>Changes in the quantity and quality of natural resources could reduce the productivity of ecosystems.</p> <p>Floods, droughts, rising sea levels, melting of glaciers and polar icecaps.</p> | <p>Without secure access to and control over natural resources (land, water, livestock, trees), women are less likely to be able to cope with climate change impacts.</p> <p>Less available drinking water means women have to expend more effort to collect, store, protect and distribute water.</p> <p>Adaptation measures, related to anti-desertification, are often labour-intensive and women often face increasing expectations to contribute unpaid household and community labour to soil and water conservation efforts.</p> <p>Decrease in forest resources used by women.</p> <p>Women often rely on a range of crop varieties (agro-biodiversity) to accommodate climatic variability, but permanent temperature change will reduce agro-biodiversity and the range of traditional medicinal plants.</p> <p>Lack of representatives and women's participation in the decision-making spheres related to climate change at all levels (local, national and international).</p> |

Adapted from UN Millennium Campaign and IUCN Report on Gender and Climate Change